

with the proviso that the sum of x, y, and z satisfies $4.4 \leq x + y + z \leq 5.4$),

a second step of treating said particles of the hydrogen absorbing alloy in an acid solution, and

Step a third step of heat-treating by sintering ~~the~~ only the particles of the hydrogen absorbing alloy treated in the acid solution at a temperature of not more than the melting point of the particles of the hydrogen absorbing alloy in a hydrogen atmosphere and thereby moving Mn contained in the particle of the hydrogen absorbing alloy to the surface of the particle of the hydrogen absorbing alloy

are carried out, to produce the hydrogen absorbing alloy, the hydrogen absorbing alloy having a sintered surface region and a bulk region covered with the surface region and satisfying the condition of $a/b \geq 1.21$, wherein a is the sum of respective abundance ratios of atoms Ni, Co, and Mn in the surface region and wherein b is the sum of respective abundance ratios of atoms Ni, Co, and Mn and the surface region having an atom manganese.
